



NPS INTERMOUNTAIN REGION PROTOCOL FOR PARK-WIDE HAZARDOUS CHEMICAL CLEAN-OUT



This protocol was developed to support the Green Purchasing efforts for Intermountain Regional Parks. Once your park has committed to using green chemicals, it is important to properly remove and/or dispose of all unusable products from the park. This action will reduce your regulatory burden and help prevent possible exposure to people and the environment from spills and leaks. This protocol outlines how to conduct a park wide clean-out in a safe and efficient way. The protocol is presented as a series of steps to be completed by Park managers, individual Park personnel, the IMDE, and/or EPA representatives in a combined effort. The following terms are used in this protocol:

Clean Out Leader:	Park manager who assumes responsibility to get the job done. Usually this is the Chief of Maintenance or his/her designee.
Clean Out Team:	Individuals who have responsibility for managing specific areas of the park. The Team should include the park Environmental "Champion" and park employees who use chemicals and are interested in participating and achieving clean-out project results.
MSDS:	Material Safety Data Sheets. These should have been sent to the park with your chemical product order. Copies can be obtained by contacting the vendor listed on the label.
Removal Products:	These are products that have been identified for removal. They may include products no-longer needed that can be re-used (by non-profit groups, for example), products that can be removed from one area in the park for use in another, or products that must be disposed of.
OSHA:	Occupational Safety and Health Association
HAZCOM:	Hazardous Communication - This program is also referred to the "Employee Right to Know" Act.

There are five basic steps to the Clean-Out Project:

1. Plan the clean-out
2. Prepare or complete the inventory
3. Develop the removal chemical list
4. Remove the chemicals
5. Close - out meeting

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✓✓ STEP 1: PLAN THE CLEAN-OUT ✓✓

Planning your park-wide clean-out is an important first step for implementing this protocol. It gives park management and staff an opportunity to discuss the project and develop an approach.

ADVANTAGES:

- * Prepares park staff for the project and assures that safety measures are understood and will be used.
- * Provides an opportunity to review and revise this protocol to fit park needs.
- * It assures good communication between all parties involved in the clean-out.
- * It is an opportunity to identify and discuss any unusual situations or safety concerns.

During the initial kick-off meeting, the Clean-Out Leader should include the following:

- ☐ Clean-Out Leader should determine the members of the Clean-Out Team. Be sure to include individuals responsible for buying, storing and using chemicals in all areas of the park. Determine what areas of the park should be cleaned up.
- ☐ Laboratories may pose special problems. Evaluate and discuss clean-out options.
- ☐ Discuss the park's generator status and determine how much waste can be accumulated before status changes. Contact Mike Schene, IMR, to review options.
- ☐ Identify a central storage area for handling and storage of removal chemicals.
- ☐ Develop a method for determining and identifying which chemicals should be reused, recycled, or disposed of. (Attachment B)
- ☐ Determine who will actually do the clean-out (physically handle the chemicals). Only those adequately trained should participate.
- ☐ Review training records to ensure that all participants have completed the 4 hour HAZCOM training and are current with their 1 hour annual refresher.
- ☐ Review the HAZCOM plan with the Clean-Out Team, especially the section that deals with incident spills and chemical emergencies. Make sure that equipment including personal protective equipment (see Attachment A) is available to the staff and that they understand what to do in the case of a spill or when finding an unlabeled container.
- ☐ Review Health and Safety Plan (Attachment E).
- ☐ Ensure that personnel with NPS 24 hour (or equivalent) HAZWOPER training are available to **immediately** respond to any chemical spills.

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✓✓ STEP 2: DEVELOP OR UPDATE THE INVENTORY ✓✓

Step two of the park-wide Clean-Out is to prepare or update an inventory of the chemical products you have in the park. Make sure you have the current Material Safety Data Sheets for all of these products.

ADVANTAGES:

- * An inventory is required by OSHA for the HAZCOM Program.
- * Parks need to know what they have before they can decide what to get rid of.
- * Once park personnel realize what it takes to manage chemical products (MSDS, paperwork, inventory) they are motivated to reduce their inventory.
- * The Clean-Out Leader will have a clear understanding of exactly what is in the park and what needs to be disposed of.
- * Opportunities for products to be used in other parks of the park or local community can be identified.

The following system was developed by Dinosaur NM. Use this system, alter it to suit your park needs, or develop your own.

- ☐ Identify the areas of the park where chemical products are stored.

Remember to list small fire safes, Ranger storage areas, fire cache, auto shop, Resource Management's pesticide storage area, laboratory and research areas, and areas where janitorial supplies are kept, such as the visitor's center.
- ☐ Identify one person who will be in charge of preparing the inventory for each area and assign him/her the task. These individuals will become part of the Park Clean-Out Team. Each Clean-Out Team member should prepare an inventory of their area. (See Attachment B for inventory tips).
- ☐ Require that current MSDSs be obtained for ALL products in the area. The person responsible for each storage area (including landfills and boneyards) or who uses and disposes materials the most, should do the inventory and identification of unknowns.
- ☐ Review the general container handling strategies in Attachment C prior to conducting the inventory.
- ☐ Set a deadline for the inventory step to be completed.
- ☐ Review the Park's chemical procurement policy (from the NPS Green Purchasing CD) with the Clean-Out Team. Products that are no longer allowed under the policy should be identified for removal.

✓✓ STEP3: DEVELOP REMOVAL CHEMICAL LIST✓✓

Now you have a list of products that need to be removed and MSDSs that tell you which precautions are needed. The next step is to decide the safest and most efficient way to collect and remove the products. Here are some ideas to think about when planning your park's chemical product removal. Involve the Clean-Out Team members in this planning step to assure their continued commitment.

- ☐ As each team member completes the inventory and collects the MSDS, the Clean-Out Team member should review the inventory and identify all products that need to be removed. For tips on how to mark these removal products, see Attachment B.
- ☐ The Clean-Out Team members should provide copies of the complete inventory, the product removal list (with their MSDSs) to the Clean-Out Leader. If any MSDS flag special considerations in handling the product, discuss with the Project Leader.
- ☐ Project Leader - Review the Product Removal List and MSDSs. Identify products that can be used in other areas of the park, or safely given to non-profit community groups for re-use (as an example). See Attachment B for more tips.
- ☐ Determine the Park's current generator status and determine how much waste can be accumulated before the status changes. Estimate the potential quantity of excess chemicals to be rounded-up, compare with the generator status quantity limits, and confirm storage time requirements.
- ☐ Call Jay Boissean at the NPS IMDE (303) 969-2271 for assistance in preparing budget requests. If you think there may be potential regulatory issues, discuss with Mike Schene, IMDE (303) 969-2877, your regulatory requirements and self-disclosure obligations.
- ☐ Identify a procedure to collect the removal products and identify a central storage area for the handling and storage of rounded-up containers. See Attachment C for tips on how to do this. Sometimes, the best place for the products is where they are. Check with your removal company to see if they charge extra for collecting removal products from several different locations as opposed to one central location.
- ☐ Develop a method for determining and identifying which chemicals should be reused, recycled, or disposed. Review the example chemical container labeling system in Attachment B.
- ☐ Determine if NFPA diamond labels are required for the storage area.

✓✓ STEP 4: REMOVE THE CHEMICALS ✓✓

At this point, you have a complete inventory of the chemical products in your park and have made a determination which of these chemicals should be removed from the current area. The Project Leader should review the inventory lists and check the MSDS to identify the status of the Clean-Out. Assemble the Clean-Out Team members to decide how and when to collect the removal chemicals. Confirm training records of all staff that participate in the Clean-Out.

- ☐ Round up the yellow-labeled containers (see Attachment B) and excess materials, and transport them to the designated Central Storage Area.
- ☐ The Central Storage Area Team will further classify and label the rounded-up containers collected and add to the inventory form per Attachment B, as follows (for final classification):
 - Chemicals for central storage and potential reuse at the Park (Blue labels)
 - Unusable chemicals and materials to be segregated for off-site recycling or disposal (Red labels).
- ☐ Criteria for separating re-usable from unusable chemicals and materials include:
 - What is the actual re-use potential of the chemical/material?
 - Is the container in good shape or rusting?
 - Has the chemical exceeded an expiration or use by date?
 - Has the material dried out, weathered, solidified, evaporated etc., beyond use? (NOTE: Do not open to determine - this will decrease the product shelf life, shake can, look at expiration date, etc.)
 - What are the manufacturers disposal instructions?
 - Does the chemical or material have hazardous ingredients? (see MSDSs)
 - Are “Green” product alternatives available?
 - Will a recycler take small quantities and one-time only deliveries?
 - How much are the off-site disposal or recycling costs?
 - Can spent materials be returned to the vendor or manufacturer?
- ☐ Be sure that when you remove products, it is done in a safe manner:
 - Chemical compatibility
 - Segregate acids, bases, oxidizers, solvents, solids, etc.
 - Container integrity
 - Check for leaks and rust
 - Repair leaks, overpack, or re-containerize contents
 - Spill containment
 - Provide secondary containment
 - Shelter from the elements
 - Are specialty storage lockers required? (i.e., flammable cabinet)
 - Are spill kits available?
 - Security - Limit access with locks and fencing
- ☐ Find out from the IMDE or the NPS Greening the Parks CD ROM if “green” products can replace the current chemicals in storage and add items to the inventory form.

✓✓ STEP 5: CLOSE-OUT MEETING AND FOLLOW-UP ✓✓

Congratulations!!! You have a clean park. This is a good time to discuss the park's policy for purchasing , storage and use of chemicals products. Experience has shown that after an initiative like this one, park personnel are ready to implement new restrictive policies that will assure they never have to conduct another Park-Wide Clean-Out. Some suggestions of things to review in the close-out meeting are:

- ☐ Evaluate the successes and problems with the Clean-Out Protocol in a close-out meeting.
- ☐ Prepare a schedule for updating the inventory. Remember, it is required annually by OSHA as part of the HAZCOM plan at all Park areas, annually as necessary.
- ☐ Develop a purchasing and inventory control plan to minimize excess materials, and eliminate unknown containers and chemical waste. Many parks have a policy that end-of-year money will not be used to purchase products.
- ☐ Evaluate and/or implement the following suggested "Greening the Parks" strategies:
 - Minimize hazardous chemicals in inventory. Promote "Green" product purchasing.
 - Never discard used oil. Collect used oil for reuse as fuel or recycle via a licensed re-refiner.
 - Change all cleaning solvents to non-hazardous citrus-based brands.
 - Convert to water-based paint for most applications.
 - Designate one shed (as practical) for fuel/flammables storage (fire proof).
 - Where practical, maintain a stockroom system for chemicals at the Central Storage area on a return basis (one empty container for one product container).
 - Substitute refillable, rechargeable dispensers for aerosol spray-cans.
 - Form a solid waste recycling committee. Promote employee and public recycling of paper, plastic, glass, and metals.
- ☐ During the annual HAZCOM annual refresher training, emphasize improved inventory control and reduced chemical use.

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